REMARKS

In Paragraph No. 1 on page 2 of the Office Action, it was stated that Figs. 15, 16, 18 and 73 should be designated as --Prior Art--.

Figs. 15 and 16 are graphs showing how the holding time affects the crystal grain size of alloys. To carry out the experiments which show the results depicted in Figs. 15 and 16, "prior art" alloys were used. Stated differently, the graphs of Figs. 15 and 16 show that if the holding time is within the range defined in claim 1 (5 seconds to 60 minutes), the crystal grain size of the alloys will not exceed 200μm. Although conventional alloys were used, the experiments were carried out to demonstrate one of the advantages of the present invention. That is, the experimental results do not show "prior art", but show an advantage of the present invention. Thus the term "prior art alloy" used in the Brief Description of the Drawings in the specification was inappropriate. A more appropriate term is "typical alloy". Figs. 15 and 16 are thus not related to "Prior Art". This position is supported by the fact that no claims are directed to "alloys".

Figs. 17 and 18 are the graphs showing how the degree of superheating of the "typical alloy" and the holding time affect the crystal grain size of the alloy. Thus, although "prior art"

alloys (= typical alloys) were used in the experiments which show the results depicted in Figs. 17 and 18, the experiments were conducted to demonstrate one of the advantages of the present invention.

In view of the above, page 13 of the specification (Brief Description of the Drawings) was amended to change "prior art alloy" to "typical alloy" in the brief descriptions of Figs. 15 to 18.

With respect of Fig. 73, submitted concomitantly herewith is a LETTER TO THE OFFICIAL DRAFTSPERSON wherein Fig. 73 is amended to label Fig. 73 as "Prior Art".

Claims 4, 13, 16 and 30 were rejected under 35 USC 112, second paragraph for the reasons set forth in Paragraph No. 3 at the middle of page 2 of the Office Action.

Claims 1, 4, 13, 16 and 30 were amended to avoid the 35 USC 112, second paragraph rejection.

The above amendments to claims 1 and 16 follow the Examiner's suggestions.

It is respectfully submitted that the present claims comply with all the requirements of 35 USC 112.

Claims 16 to 19 and 39 were provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1 to 4 of copending application Serial No. 08/967,136.

Claims 1 to 4 were cancelled in copending application Serial

No. 08/967,136 in an AMENDMENT UNDER 37 CFR 1.111 mailed on September 1, 1999.

Withdrawal of the double patenting rejection is therefore respectfully requested.

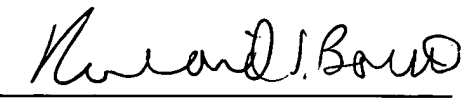
It is noted that claims 1 to 3, 5 to 12, 14, 15, 20 to 29, 31 to 38 and 40 were allowed (see Paragraph No. 6 on page 3 of the Office Action) and that claims 4, 13 and 30 were deemed to be allowable (see Paragraph No. 7 on page 3 of the Office Action). Since it is considered that the 35 USC 112, second paragraph rejection has been overcome, claims 4, 13 and 30 should be allowed.

No prior art rejection was set forth in the Office Action.

Reconsideration is requested. Allowance is solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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